

CLAIMS

1. A method of performing continuous bleed-and-feed of process solution from and to a holding tank comprising the steps:

bleeding aged solution from the holding tank to a secondary container;
measuring a predetermined amount of the aged solution in the secondary container;
disposing the aged solution in the secondary container;
filling the secondary container with the predetermined amount of a new solution from a supply tank; and
feeding the predetermined amount of the new solution to the holding tank.

2. The method of claim 1, wherein the secondary container includes a secondary container tube having a sensor and the step of measuring includes:

sensing the predetermined amount of the aged solution; and
shutting a bleed valve for the holding tank in response to sensing the predetermined amount of the aged solution in the secondary container tube.

3. The method of claim 1, wherein the secondary container is substantially smaller in volume compared to the holding tank.

4. The method of claim 1, wherein the step of bleeding includes flowing the aged solution through a manifold to the secondary container.

5. The method of claim 4, wherein the step of filling the secondary container includes flowing the predetermined amount of the new solution through the manifold to the secondary container.

6. The method of claim 1, where the step of filling the secondary container includes sensing the predetermined amount of the new solution in the secondary container.

7. The method of claim 1, wherein the step of feeding the predetermined amount of the new solution to the holding tank includes flowing the new solution in the secondary container through an output line feeding the holding tank.

8. The method of claim 2 further comprising the step of overflowing solution in the secondary container to the holding tank in response to a failure in the step of sensing.
9. The method of claim 1 further comprising the step of dosing at least one additive into the holding tank corresponding to a volume fraction of the amount of the new solution fed to the holding tank.
10. The method of claim 9, wherein the step of dosing is performed at a predetermined interval.
11. The method of claim 9, wherein the additive comprises an organic additive.
12. The method of claim 1 further comprising the step of replenishing DI water to the holding tank.
13. The method of claim 12, wherein the step of replenishing is performed at a predetermined interval.
14. The method of claim 13, wherein the step of replenishing includes:
flowing DI solution through a manifold to the secondary container;
sensing a predetermined amount of the DI water in the secondary container; and
feeding the DI water to the holding tank.